

# ***Application Part A — Project Description, Organizational, Financial and Legal Information***

## **A-1 Urban Water Conservation Grant Application Cover Sheet**

1. Applicant (Organization or affiliation): RANCHO CALIFORNIA WATER DISTRICT  
2. Project Title: COMMERCIAL LANDSCAPE IRRIGATION AUDIT

3. Person authorized to sign and submit proposal:

<b>Name, Title</b>	<u>Kenneth C. Dealy, Director of O&amp;M</u>
<b>Mailing address</b>	<u>42135 Winchester Road Temecula, CA 92591</u>
<b>Telephone</b>	<u>(909) 296-6900</u>
<b>Fax</b>	<u>(909) 296-6865</u>
<b>E-mail</b>	<u>kend@ranchowater.com</u>

4. Contact person (if different):

<b>Name, Title</b>	_____
<b>Mailing address</b>	_____
<b>Telephone</b>	_____
<b>Fax</b>	_____
<b>E-mail</b>	_____

5. Funds requested (dollar amount): \$141,000.00

6. Applicant funds pledged (local cost share) (dollar amount): \$ .00

7. Total project costs (dollar amount): \$141,000.00

8. Estimated net water savings (acre-feet/year): 141

Estimated total amount of water to be saved (acre-feet):

Over 20 years 2820

Benefit/cost ratio of project for applicant: 1.29

Estimated \$/acre-feet of water to be saved: \$ 430.00

9. Project life (month/year to month/year): 7/2003-6/2006

10. State Assembly District where the project is to be conducted: 66

11. State Senate District where the project is to be conducted: 36

12. Congressional District(s) where the project is to be conducted: 48

13. County where the project is to be conducted: RIVERSIDE

14. Do the actions in this application involve physical changes in land use, or potential future changes in land use?

(a) Yes \_\_\_\_\_

(b) No x

## A-2 Application Signature Page

By signing below, the official declares the following:

The truthfulness of all representations in the application;

The individual signing the form is authorized to submit the application on behalf of the applicant;

The individual signing the form read and understood the conflict of interest and confidentiality section and waives any and all rights to privacy and confidentiality of the application on behalf of the applicant; and

The applicant will comply with all terms and conditions identified in this Application Package if selected for funding.

\_\_\_\_\_  
Signature

Kenneth C Dealy, Director of O&M  
Name and title

\_\_\_\_\_  
Date

### **A-3 Application Checklist**

Complete this checklist to confirm all sections of this application package have been completed.

#### **Part A: Project Description, Organizational, Financial and Legal Information**

- ☒ A-1 Urban Water Conservation Grant Application Cover Sheet
- ☒ A-2 Application Signature Page
- ☒ A-3 Application Checklist
- ☒ A-4 Description of project
- ☐ A-5 Maps
- ☒ A-6 Statement of work, schedule
- ☒ A-7 Monitoring and evaluation
- ☒ A-8 Qualification of applicant and cooperators
- ☒ A-9 Innovation
- ☒ A-10 Agency authority
- ☐ A-11 Operation and maintenance (O&M)

#### **Part B: Engineering and Hydrologic Feasibility (construction projects only)**

- ☐ B-1 Certification statement
- ☐ B-2 Project reports and previous studies
- ☐ B-3 Preliminary project plans and specifications
- ☐ B-4 Construction inspection plan

#### **Part C: Plan for Environmental Documentation and Permitting**

- ☐ C-1 CEQA/NEPA
- ☐ C-2 Permits, easements, licenses, acquisitions, and certifications
- ☐ C-3 Local land use plans
- ☐ C-4 Applicable legal requirements

#### **Part D: Need for Project and Community Involvement**

- ☒ D-1 Need for project
- ☒ D-2 Outreach, community involvement, support, opposition

#### **Part E: Water Use Efficiency Improvements and Other Benefits**

- ☒ E-1 Water use efficiency improvements
- ☒ E-2 Other project benefits

#### **Part F: Economic Justification, Benefits to Costs Analysis**

- ☐ F-1 Net water savings
- ☐ F-2 Project budget and budget justification
- ☐ F-3 Economic efficiency

#### **Appendix: Benefit/Cost Analysis Tables**

- ☒ Tables 1; 2; 3; 4a, 4b, 4c, 4d; and 5

#### **A-4 Description of Project**

The Landscape Water Management Program as proposed will consist of audits of large landscape customers. Rancho California Water District (District) proposes to contract with the San Jacinto Basin Resource Conservation District (RCD) to perform this program. Certified auditors from the RCD will verify the total landscaped area for purposes of validating the Maximum Allowable Water Use computation, making adjustments as necessary. The irrigation system, as installed, is then compared to the architect's design and As Built plans and any discrepancies noted. The audit process involves the collection of field data, including the measurement of sprinkler head outputs, pressures, overall system uniformity and irrigation efficiencies. The auditors also check the operation of the irrigation clock and propriety of the irrigation times given season and zone being irrigated. Following the field data collection phase, a preliminary report is provided to the property owner, landscape contractor and the District. The report typically highlights maintenance and/or irrigation scheduling deficiencies that need to be corrected before the second phase of the audit can proceed. The purpose here is to assure that the system is in optimum operating condition before final measurements for irrigation scheduling purposes are completed. Phase two involves verification that needed repairs and equipment adjustments have been completed followed by uniformity testing of those landscape zones responsible for the greatest water use (usually turf). Based on the results, seasonal irrigation scheduling guidelines are prepared for each zone, which may be used for clock settings. We train the contractor to use the RCD's toll-free Irrigation Water Management Hotline for updating their clocks when conditions become unseasonable.

#### **A-5 Maps**

#### **A-6 Statement of Work, Schedule**

The Program will begin, subject to funding, in Fiscal Year 2003-04 and continue for three years. Contracts will be executed with the RCD upon approval of funding. 100 audits are planned each year.

#### **A-7 Monitoring and Evaluation**

Metered consumption will be compared to consumption history to document savings.

#### **A-8 Qualifications of the Applicant and Cooperators**

Kenneth C. Dealy, Director of Operations and Maintenance, Rancho California Water District. Oversees maintenance and operation of facilities serving 35000 water customers and 10000 sewer customers. 31 years experience in field.

#### **A-9 Innovation**

None.

## **A-10 Agency Authority**

Address the following five questions pertaining specifically to this application.

1. Does the applicant (official signing A-2, Application Signature Page) have the legal authority to submit an application and to enter into a funding contract with the State? Yes

2. What is the legal authority under which the applicant was formed and is authorized to operate?

California Water District for as State Special District

3. Is the applicant required to hold an election before entering into a funding contract with the State?  
No

4. Will the funding agreement between the applicant and the State be subject to review and/or approval by other government agencies? If yes, identify all such agencies (e.g. Local Area Formation Commission, local governments, U.S. Forest Service, California Coastal Commission, California Department of Health Services, etc.).  
No

5. Is there any pending litigation that may impact the financial condition of the applicant, the operation of the water facilities, or its ability to complete the proposed project? If none is pending, so state.  
None

# Application Part D- Need for Project and Community Involvement

## **D-1 Need for the Project**

California is required to stay with its 4.4 million acre foot requirement of Colorado River supplies. The District is supplied Colorado River Water through Metropolitan Water District of Southern California.

## **D-2 Outreach, Community Involvement, Support, Opposition**

The District has a public information system and Public Relations Specialist to interface with community groups.

# ***Application Part E—Water Use Efficiency Improvements and Other Benefits***

## **E-1 Water Use Efficiency Improvements**

This program seeks to encourage conservation of water by Commercial landscape Systems by recommending system improvements and monitoring.

## **E-2 Other Project Benefits**

Will reduce reliance on imported supplies.

Applicant:

THE TABLES ARE FORMATTED WITH FORMULAS: FILL IN THE SHADED AREAS ONLY

**Table 1: Capital Costs**

	Capital Cost Category (a)	Cost (b)	Contingency Percent (c)	Contingency \$ (d) (bxc)	Subtotal (e) (b+d)
(a)	Land Purchase/Easement			0	0
(b)	Planning/Design/Engineering			0	0
(c)	Materials/Installation			0	0
(d)	Structures			0	0
(e)	Equipment Purchases/Rentals			0	0
(f)	Environmental Mitigation/Enhancement			0	0
(g)	Construction/Administration/Overhead			0	0
(h)	Project Legal/License Fees			0	0
(i)	Other			0	0
(j)	Total (1) (a + ... + i)				0
(k)	Capital Recovery Factor: Use Table 6				
(l)	Annual Capital Costs (j x k)				0

(1) Costs must match Project Budget prepared in Section F-2.

Applicant:

**Table 2: Annual Operations and Maintenance Costs**

Administration (a)	Operations (b)	Maintenance (c)	Other (d)	Total (e)
				0

**Table 3: Total Annual Costs**

Annual Capital Costs (1)  (a)	Annual O&M Costs (2)  (b)	Total Annual Costs  (c) (a+b)
0	0	0

(1) From Table 1, line (l)

(2) From Table 2, column (e)



Applicant:

**Table 4: Water Supply Benefits**  
(2002 Dollars)

Net water savings (acre-feet/year) \_\_\_\_\_ 141 \_\_\_\_\_

**4a. Avoided Costs of Current Supply Sources**

Sources of Supply (a)	Cost of Water (\$/AF) (b)	Annual Displaced Water Supply (AF) (c)	Annual Avoided Costs (\$) (d) (b x c)
MWD of S. California	\$431	141	\$60,771
			\$0
			\$0
			\$0
			\$0
<b>Total</b>			<b>\$60,771</b>

**4b. Alternative Costs of Future Supply Sources**

Future Supply Sources (a)	Total Capital Costs (\$) (b)	Capital Recovery Factor (1) (c)	Annual Capital Costs (\$) (d) (bxc)	Annual O&M Costs (\$) (e)	Total Annual Costs (\$) (f) (d+e)
			0		0
			0		0
			0		0
			0		0
			0		0
<b>Total</b>					<b>0</b>

(1) Use number from Capital Recovery Factor Table 6

**4c. Water Supplier Revenue (Vendability)**

Parties Purchasing Project Supplies (a)	Amount of Water to be Sold (AF) (b)	Selling Price (\$/AF) (c)	Expected Frequency of Sales (1) (%) (d)	Expected Selling Price (\$/AF) (e) (cxd)	"Option" Fee (2) (\$/AF) (f)	Total Selling Price (\$/AF) (g) (e+f)	Annual Expected Water Sale Revenue (\$) (h) (b x g)
Various Customers	141	264	100.00%	264		264	37,154
300 accounts				0		0	0
				0		0	0
				0		0	0
				0		0	0
<b>Total</b>							<b>37,154</b>

(1) During the analysis period, what percentage of years are water sales expected to occur?

For example, if water will only be sold half of the years, enter 50% (0.5).

(2) "Option" fees are paid by a contracting agency to a selling agency to maintain the right of the contracting agency to buy water whenever needed. Although the water may not be purchased every year, the fee is usually paid every year.

**Table 4d. Total Water Supply Benefits**

(a) Annual Avoided Costs of Current Supply Sources from 4a, column (d)	60,771
(b) Annual Avoided Costs of Alternative Future Supply Sources from 4b, column (f)	0
(c) Annual Expected Water Sale Revenue from 4c, column (h)	37,154
(d) Total Net Annual Water Supply Benefit (\$) (a+b+c)	97,925

**Applicant:**

**Table 5: Benefit/Cost Ratio**

<b>Project Benefits (\$)(1)</b>	97,925
<b>Project Costs (\$)(2)</b>	0
<b>Benefit/Cost Ratio</b>	0.00

(1) From Table 4d, row (d): Total Annual Water Supply Benefits

(2) From Table 3. column ( c ): Total Annual Costs

**Table 6: Capital Recovery Table**

Life of Project (in years)	Capital Recovery Factor
7	0.1791
8	0.1610
9	0.1470
10	0.1359
11	0.1268
12	0.1193
13	0.1130
14	0.1076
15	0.1030
16	0.0990
17	0.0954
18	0.0924
19	0.0896
20	0.0872
21	0.0850
22	0.0830
23	0.0813
24	0.0797
25	0.0782
26	0.0769
27	0.0757
28	0.0746
29	0.0736
30	0.0726
31	0.0718
32	0.0710
33	0.0703
34	0.0696
35	0.0690
36	0.0684
37	0.0679
38	0.0674
39	0.0669
40	0.0665
41	0.0661
42	0.0657
43	0.0653
44	0.0650
45	0.0647
46	0.0644
47	0.0641
48	0.0639
49	0.0637
50	0.0634